UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK	
JOHNSON & JOHNSON, a New Jersey Corporation,	x : :
Plaintiff,	FILED UNDER SEAL
- against -	: Affidavit of Gregg A. Jarrell
GUIDANT CORPORATION, an Indiana Corporation,	· : :
Defendant.	: : x
STATE OF NEW YORK )	
COUNTY OF MONROE ) ss.:	

Gregg A. Jarrell, being duly sworn, deposes and says:

## Qualifications

- 1. I am currently a tenured Professor of Economics and Finance at the University of Rochester's Simon School of Business, where I have been a member of the faculty since 1988. I hold a Ph.D. in Business Economics from the University of Chicago (1978), with major concentrations in Industrial Organization and Finance, as well as an MBA (1976) from the University of Chicago. I received a B.S. in Business Administration from the University of Delaware (1974). I attended high school at New York Military Academy (1967-1970).
- 2. From 1977 to 1981, I was an Assistant Professor of Economics at the Graduate School of Management at the University of Rochester. From 1981 to 1983, I was a Post-Doctoral Research Fellow at the University of Chicago's Center for the Study of the

Economy and the State. Thereafter, from 1983 to 1984, I was a Senior Economist with Lexecon, Inc., a Chicago-based economics consulting firm specializing in antitrust and securities litigation. I also served as an expert in mergers and acquisitions on the 1983 United States Securities and Exchange Commission (the "SEC") Advisory Committee on Tender Offer Policy.

- 3. From 1984 through 1987, I was the Chief Economist for the SEC in Washington, D.C. I also served as an Adjunct Professor at the Georgetown University Law School in Washington, D.C. during 1985 and 1986, where I co-taught a course on securities regulation. After leaving Washington, D.C. in 1987, I was the AT&T Foundation Resident Management Fellow at the University of Rochester's Simon School. From 1987 to 1988, I was the Senior Vice President and Director of Research at the Alcar Group, Inc., a Chicagobased management consulting and software firm specializing in financial valuations of businesses and securities.
- 4. Since joining the Simon School faculty at the University of Rochester as a tenured professor, I have served (from 1988 to 1990) as director of the school's Managerial Economics Research Center. I also served as director of the Bradley Policy Research Center at the Simon School from 1990 to 1994. While at the Simon School, I have taught a course titled Cases in Finance to second-year MBA students that covers, among other subjects, the operation of financial markets and the market for corporate control, the economics of mergers and acquisitions, valuation analysis for businesses and securities, the response of stock prices to public information, and financial regulation of securities markets. I also teach a price theory course called Managerial Economics that includes applications of intra-company pricing of transfers of products and

services. I have received sixteen Superior Teaching Awards. I have authored or coauthored more than two dozen articles and studies in scholarly journals generally on the topics of mergers and acquisitions, the regulation of financial markets, and the response of stock prices to the release of information, among other things. My curriculum vitae, with a list of publications and of recent cases in which I have testified as an expert at deposition or trial, is appended to this affidavit.

# What I Was Asked To Do

5. I was asked to offer an opinion as to the amount of damages based on a "benefit of the bargain" approach suffered by Johnson & Johnson ("J&J") as a result of what is alleged to have been a breach by Guidant Corporation ("Guidant") of a merger agreement between those two parties. I previously submitted in this action an expert report dated January 26, 2011.

#### Damages Opinion

6. To determine the lost benefit of the bargain to J&J, damages may be calculated as the difference between (i) the bargained-for purchase price agreed to in the merger agreement – \$63.08 per share – which I refer to as the "contract price" and (ii) either the investment value of Guidant to J&J, or Guidant's fair market value. Investment value is "the specific value of an investment to a particular investor or class of investors based on individual investment requirements; distinguished from market value, which is impersonal and detached." S. Pratt, Valuing a Business: The Analysis and Appraisal of Closely Held Companies, Fifth Edition, McGraw Hill, 2008, p. 43. Fair market value "is the amount at which a property would change hands between a willing seller and a willing

buyer when neither is acting under compulsion and when both have reasonable knowledge of the relevant facts." *Id.*, pp. 41-42.

- 7. I calculated J&J's damages in three different ways. Two are based on alternative ways of measuring the investment value of Guidant to J&J, and one is based on Guidant's fair market value. My calculations are predicated on a finding by the Court that Guidant breached its merger agreement with J&J and on the assumption that, but for that breach, J&J would have completed its acquisition of Guidant at \$63.08 per share.
- 8. First, I calculated J&J's damages as the difference between the \$63.08 per share contract price and the highest offer that J&J was prepared to pay for Guidant \$75.00 per share (an amount that I refer to as J&J's "revealed preference"). By this approach, damages are \$11.92 per share (*i.e.*, \$75.00 \$63.08) or, when multiplied by the number of fully-diluted shares outstanding at Guidant, \$4.315 billion. See Demonstrative Exhibit 1. Based on my understanding that J&J will present evidence at trial proving that J&J's management was prepared to seek Board authorization to make a \$75.00 per share offer, and that Goldman was prepared to issue a fairness opinion to support that offer, I believe that J&J's planned offer of \$75.00 per share represents the best evidence of Guidant's investment value to J&J.
- 9. Second, I measured J&J's damages as the difference between the \$63.08 per share contract price and the investment value of Guidant to J&J, as evident from the valuation analyses used by J&J to reach its planned offer of \$75.00 per share. For each

When using the last actual offer made by J&J of \$71.00 per share, then J&J's per share damages are equal to the difference between the \$63.08 per share contract price and the \$71.00 per share offer. By this approach, damages are \$7.92 per share (*i.e.*, \$71.00 - \$63.08) or, when multiplied by the number of fully-diluted shares outstanding at Guidant, \$2.883 billion.

of its offers, J&J compared the proposed acquisition purchase price to a discounted cash flow ("DCF") based valuation of Guidant. The difference between these proposed purchase prices and the DCF values represent the net present value of the transaction to J&J. Based on these analyses, a transaction at the contract price of \$63.28 per share had a net present value to J&J of \$5.1 billion. (Korbich Ex. 28, at GG-JJ018862). J&J's January 13, 2006 offer of \$71.00 per share had a net present value of \$2.0 billion to J&J. (*Id.* at GG-JJ018855). J&J's planned offer of \$75.00 per share had a net present value of \$0.7 billion to J&J. (*Id.*). Using the valuation supporting J&J's planned offer of \$75.00 per share, the investment value of Guidant may be calculated by adding the net present value of a transaction at that price, \$0.7 billion, to the total acquisition cost of a transaction priced at \$75 per share, \$23.2 billion, yielding a total investment value of \$23.9 billion. Using that figure, J&J's damages may be calculated as the difference between \$23.9 billion and the contracted-for acquisition cost, \$19 billion.<sup>2</sup> (*Id.* at GG-JJ018862). By this approach, J&J's damages are \$4.9 billion. *See* Demonstrative Exhibit 1.

10. Third, I measured J&J's damages as the difference between the \$63.08 per share contract price and the fair market value of Guidant. The best evidence of Guidant's fair market value is represented by the winning bid from Boston Scientific Corporation ("BSC") of \$80.00 per share, which resulted from a highly-publicized multiple-round bidding war with arms-length negotiations conducted between a willing

J&J's DCF valuations for Guidant may be calculated by adding together the net present value and the net acquisition price of each of its bids: (a) \$24.1 billion at November 13, 2005: \$19.0 billion net acquisition price at \$63.08 per share, plus \$5.1 billion net present value; (b) \$23.8 billion at January 13, 2006: \$21.8 billion net acquisition price at \$71 per share, plus \$2.0 billion net present value; (c) \$23.9 billion at January 18, 2006: \$23.2 billion net acquisition price at \$75 per share, plus \$0.7 billion net present value. (Korbich Ex. 28, at GG-JJ 018850, GG-JJ 018862).

buyer and a willing seller, both of whom were well informed about Guidant's business prospects and with neither party acting under compulsion to complete the transaction. Using BSC's \$80.00 per share purchase price as Guidant's fair market value, J&J's damages may be calculated as the difference between the \$63.08 per share contract price and the \$80.00 per share fair market value of Guidant. By this approach, damages are \$16.92 per share (*i.e.*, \$80.00 - \$63.08) or, when multiplied by the number of fully-diluted shares outstanding at Guidant, \$6.1 billion. *See* Demonstrative Exhibit 1.

11. In my opinion, my first calculation, based on J&J's revealed preference – its preparedness to pay \$75.00 per share for Guidant – is the most appropriate measure of J&J's lost benefit of the bargain because it measures what Guidant was worth to J&J and does so based on J&J's actual behavior.

## **Event Study**

- 12. To corroborate my results, I performed an event study analysis to assess whether information about the benefits of J&J's prospective acquisition of Guidant at the contracted-for price of \$63.08 was reflected in the price of J&J's stock. If the market viewed a transaction at that price as having a positive net present value to J&J, I would expect to find a significant, positive, non-transitory price response to the disclosure that J&J and Guidant had agreed to reduce the purchase price of Guidant from the originally contracted-for price of \$76.00 per share down to \$63.08 per share.
- 13. An event study is an empirical technique that measures the effect of new information on the market prices of a company's publicly traded securities. This is done by comparing the day-to-day percentage change in the market price of a company's common stock (known as a "return") to the return predicted by a market model that uses a

market index, such as the S&P 500 Index or the Nasdaq Composite Index, and possibly an industry index. The market model describes the normal relation between the return on the company's common stock and the return on the market and industry indexes. When significant new information about the company (e.g., corrective disclosures, earnings reports, dividend changes, stock-splits, regulatory rulings or investigations, acquisition bids, asset sales, or tax legislation) is disclosed to the market, the market model is used to determine the component of the stock return that would be expected based on the return of the overall market and industry. The remaining component of the stock return (which cannot be explained by the return on the market and industry) is attributed to the new company-specific information or volatility. If the disclosure of the new information is accompanied by a stock return that is outside of the stock's normal volatility range (as measured by the market model), then the return is said to be statistically significant.

- J&J's return is regressed against the market and net-of-market industry variables to estimate the historical relation between the independent index variables and the dependent company returns. The indexes explain or account for some portion of the day-to-day movements in J&J's gross return so that the unexplained portion of the company's stock return can be attributed to factors specific to J&J, exclusive of any co-movement in the market-wide and net-of-market industry indexes. Demonstrative Exhibit 3 is a summary of the stock prices, volumes, and returns for J&J as well as returns for the market and industry indexes when J&J announced it had renegotiated a lower purchase price for Guidant.
- 15. The revised price was announced to the market on Tuesday, November 15, 2005, before the market opened. On that day, J&J's common stock price

increased \$2.32 per share to close at \$62.83 per share. The excess return is statistically significant at the 99% confidence level, with an excess price increase of \$2.63 per share (excluding market and industry effects). Based on J&J's approximately 3 billion outstanding shares, the excess change in J&J's market capitalization was \$7.8 billion (*i.e.*, \$2.63 per share x 2.975 billion shares), net of any market and industry effects. *See* Demonstrative Exhibit 3.

- 16. I examined the news from the close of trading on Monday, November 14, through the close of trading on Tuesday, November 15, and did not find any confounding, economically material information that might have been a contributing factor in J&J's stock price increase. The financial press attributed the rise in J&J's stock price to the renegotiated deal with Guidant. Wall Street analysts also viewed the re-priced deal as beneficial to J&J. See, for example:
  - "We Think JNJ Wins and <u>GDT Blinks</u>.... We Think This Is a <u>Good Deal for JNJ</u> and Less of One for GDT." (A.G. Edwards, November 15, 2005)
  - "We think <u>J&J got GDT for a steal</u>." (SG Cowen & Co., November 15, 2005)
  - "<u>Guidant Blinks</u> . . . . It appears that <u>JNJ played</u> <u>hardball</u> with Guidant during the negotiations. We were <u>surprised that Guidant took the price</u> <u>offered</u> . . . " (Morgan Stanley, November 15, 2005)

See, for example, "Before the Bell – Johnson Rises on Inet," Reuters News, November 15, 2005 at 7:27 am; "J&J, Guidant Revise Merger Pact, Cutting Deal's Value 15%," Dow Jones News Service, November 15, 2005 at 9:13 am; "Guidant, JNJ Shares Rise Premarket After Revise Deal," Dow Jones Commodities Service, November 15, 2005 at 3:05 pm; "DJ US Stocks Drop, With J&J and Guidant Bucking the Slide," Dow Jones Commodities Service, November 15, 2005 at 3:05 pm; "Stocks Open Mixed; J&J, Guidant Gain on Revised Deal Terms," AFX Asia, November 15, 2005.

- "Assuming the deal does close, it's in our view a <u>clear positive for Johnson & Johnson</u>, based on its ability to acquire Guidant, enter the CRM market, and potentially enhance its long-term competitiveness in Interventional Cardiology at <u>such a reduced price</u>."
   (JPMorgan, November 15, 2005)
- "GDT caved to JNJ's demands, taking \$63 per share..." (Citigroup, November 16, 2005)
- 17. Therefore, in my opinion, the \$7.8 billion increase in J&J's market capitalization on November 15, 2005, net of market and industry effects, is attributable to the announcement that J&J and Guidant agreed to reduce the purchase price of Guidant down from \$76.00 per share to \$63.08 per share. I believe this shows that my damage calculations, using either the investment value or the fair market value of Guidant, are not too large, but rather are supported by this market-based computation of the benefit to J&J as evidenced by J&J's stock-price reaction.

#### Set Off

18. I understand that Guidant paid J&J a \$705 million fee when it terminated its merger agreement with J&J. Counsel has asked that I subtract all or part of the pre-tax termination fee from the result of my damages calculations, depending on which method is used. If damages are calculated as the difference between the contract price and the fair market value of Guidant (*i.e.*, \$80.00 per share), then the full amount of the \$705 million fee is deducted from J&J's damages. Otherwise J&J would be put in a better position than it would have been had Guidant performed under the contract. If damages are calculated as the difference between the contract price and the investment value of Guidant to J&J (*i.e.*, \$75.00 per share), then \$80 million is deducted from J&J's damages. The full amount of the fee is not deducted from J&J's damages because J&J's contemporaneous net

present value calculations already subtracted from the value of the contemplated transaction the amount of the termination fee that J&J would forego if the transaction was completed. For purposes of those calculations, J&J deducted the termination fee under its November 14, 2005 Merger Agreement with Guidant, which amounted to \$625 million on a pre-tax basis, from the net present value of an acquisition of Guidant. Accordingly, the difference between the amount of that deduction and the amount of the fee actually received by J&J, \$80 million (*i.e.*, \$705 million - \$625 million), is deducted from J&J's damages.

approximately: (a) \$4.235 billion, if calculated as the difference between the contract price and the investment value of Guidant, as evident from J&J's revealed preference (*i.e.*, \$4.315 billion - \$80 million); (b) \$4.820 billion, if calculated as the difference between the contract price and the investment value of Guidant, as evident from J&J's net present value calculations (*i.e.* \$4.900 billion - \$80 million); or (c) \$5.398 billion, if calculated as the difference between the contract price and the fair market value of Guidant (*i.e.*, \$6.103 billion - \$705 million). *See* Demonstrative Exhibit 1.

## **Pre-Judgment Interest**

20. I understand that J&J is seeking pre-judgment interest of 8%, using simple interest from the date on which Guidant terminated the merger agreement, January 25, 2006. Applying 8.0% pre-judgment interest to J&J's damages yields the following values, as of October 10, 2014:<sup>4</sup>

Pre-judgment interest is calculated over the 8.71 year period from January 25, 2006 to October 10, 2014.

<u>Investment Value (revealed preference)</u>	
Damages	\$4,235,000,000
Pre-Judgment Interest	$+$2,950,948,000^5$
Total	\$7,185,948,000
Investment Value (net present value) Damages Pre-Judgment Interest Total	\$4,820,000,000 + <u>\$3,358,576,000</u> <sup>6</sup> \$8,178,576,000
Fair Market Value Damages Pre-Judgment Interest Total	\$5,398,000,000 + <u>\$3,761,326,400</u> <sup>7</sup> \$9,159,326,400

<sup>\$2,950,948,000</sup> equals \$4,235,000,000 multiplied by 8.0% pre-judgment interest multiplied by the 8.71 year pre-judgment period.

<sup>\$3,358,576,000</sup> equals \$4,820,000,000 multiplied by 8.0% pre-judgment interest multiplied by the 8.71 year pre-judgment period.

<sup>&</sup>lt;sup>7</sup> \$3,761,326,400 equals \$5,398,000,000 multiplied by 8.0% pre-judgment interest multiplied by the 8.71 year pre-judgment period.

21. After October 10, 2014, interest will accrue at a rate of: (i) \$928,219.18 per day on a damages award of \$4,235,000,000;<sup>8</sup> (ii) \$1,056,438.36 per day on a damages award of \$4,820,000,000;<sup>9</sup> and (iii) \$1,183,123.29 per day on a damages award of \$5,398,000,000.<sup>10</sup>

Ing A Marell
Gregg A. Varrell

Sworn to before me this day of October 2014

Notary Public

DEREK B LAVARNWAY
Notary Public, State of New York
Qualified in Monroe County
Registration 01LA6207948
Commission Expires June 22, 2017

<sup>\$</sup> \$928,219.18 equals \$4,235,000,000 multiplied by 8.0% pre-judgment interest divided by 365 days per year.

 $<sup>^9</sup>$  \$1,056,438.36 equals \$4,820,000,000 multiplied by 8.0% pre-judgment interest divided by 365 days per year.

<sup>\$1,183,123.29</sup> equals \$5,398,000,000 multiplied by 8.0% pre-judgment interest divided by 365 days per year.